

**Flood Control Project Maintenance
Levee Inspections**

Fall 2010 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

MA0005	Overall LMA Rating	Total LMA Miles	* Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.			
Sutter Maintenance Yard Maintenance Area 0005	M *	33.32				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroachments	
					PO Miles	CO Miles
Vegetation	0.02		0.02	0.06%		
Encroachments	0.10		0.10	0.30%		0.01
Animal Control	0.03		0.03	0.09%		
Slope Stability	0.01		0.01	0.03%		
Repair Gates	0.01		0.01	0.03%		
USACE Erosion Survey		0.03	0.12	0.36%		
<i>LMA Totals:</i>	0.17	0.03	0.29	0.87% *	0.00	0.01

Unit No. 01 Butte Creek 1	Overall Unit Rating	Total Unit Miles	* Overall Unit Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall Unit Rating is M instead of A.			
	M *	15.29				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroachments	
					PO Miles	CO Miles
Vegetation	0.01		0.01	0.07%		
Encroachments	0.04		0.04	0.26%		
Repair Gates	0.01		0.01	0.07%		
USACE Erosion Survey		0.03	0.12	0.78%		
<i>Unit Totals:</i>	0.06	0.03	0.18	1.18% *	0.00	0.00

Unit No. 02 Butte Creek 1	Overall Unit Rating	Total Unit Miles				
	A	16.53				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroachments	
					PO Miles	CO Miles
Vegetation	0.01		0.01	0.06%		
Encroachments	0.06		0.06	0.36%		0.01
Animal Control	0.03		0.03	0.18%		
Slope Stability	0.01		0.01	0.06%		
<i>Unit Totals:</i>	0.11	0.00	0.11	0.67%	0.00	0.01

Unit No. 03 Little Chico Creek Diversion 1	Overall Unit Rating	Total Unit Miles				
	A	1.50				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroachments	
					PO Miles	CO Miles
No Items						
<i>Unit Totals:</i>	0.00	0.00	0.00	0.00%	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2010 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0005

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)			M	

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

*
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2010 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0005

Waterway			Bank	Unit Miles
Unit No. 01 Butte Creek 1			Left	15.29
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M	
Date of Inspection	3/22/2010		9/21/2010	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Jason Cooper Sutter Yard		Jason Cooper Sutter Yard	
	Karen Hull Sutter Yard		Karen Hull Sutter Yard	
	Joel Farias Jr. Sutter Yard		Joel Farias Jr. Sutter Yard	

Check one:

- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. We have found no changes in flood project conditions other than the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the enclosed report.
- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. In addition to the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the report, we have found the following changes in flood project conditions.

(In the comment section below or on additional sheet(s), identify change of condition by: Start to End Levee Mile or GPS coordinates, location (Land Side, Water Side, or Crown), Item identification, and description of the current condition).

Comments

One of the boxes above is to be checked by the Local Maintaining Agency (LMA). If the second box is checked, additional information must also be submitted. This Unit Cover Sheet should be signed and dated by the LMA Representative and returned to DWR with any additional sheets by September 30 (Summer Inspection) or March 31 (Winter Inspection). Please retain a copy for your records. Please mail all of this information to :

DWR Summer/Winter Inspection Reports
3310 El Camino Avenue, Room LL-30
Sacramento, CA 95821-9000

X

Signature of LMA Representative

Date

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2010

Sutter Maintenance Yard Maintenance Area 0005

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector	
Unit No. 01 Butte Creek 1						Left	15.29	11/03/2010 11/03/2010	Bob Duffey	
LMR No.	Levee Mile		Category	Item	* Location	** Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
1	0.58	0.58	Earthen Levee	Vegetation	LS	M	Elderberries are blocking visibility and flood fight capability.	39.690745 ° -121.777342 °	39.690745 ° -121.777342 °	903
2	1.56	1.56	Earthen Levee	Encroachments	LS	C	Garbage	39.677235 ° -121.777687 °	39.677235 ° -121.777687 °	907
3	1.68	1.68	Earthen Levee	Encroachments	LS	M	Debris	39.675528 ° -121.778642 °	39.675528 ° -121.778642 °	1 Y
4	1.85	1.85	Earthen Levee	Slope Stability	LS	C	Repair the levee slope damaged by vehicle traffic and prevent access where possible.	39.673855 ° -121.779992 °	39.673855 ° -121.779992 °	908
5	2.13	2.13	Earthen Levee	Repair Gates	CR	M		39.670112 ° -121.782012 °	39.670112 ° -121.782012 °	10
6	2.29	2.29	Earthen Levee	Slope Stability	LS	C	Repair the levee slope damaged by vehicle traffic and prevent access where possible.	39.667917 ° -121.782742 °	39.667917 ° -121.782742 °	904
7	2.86	2.86	Earthen Levee	Encroachments	LS	M	Prunings	39.660124 ° -121.785136 °	39.660124 ° -121.785136 °	2
8	2.87	2.87	Earthen Levee	Animal Control	LS	C	Exterminate rodents and backfill and compact or grout burrows.	39.660112 ° -121.785368 °	39.660112 ° -121.785368 °	909
9	3.12	3.12	Earthen Levee	Encroachments	LS	M	Prunings	39.656779 ° -121.787127 °	39.656779 ° -121.787127 °	3
10	3.13	3.13	Earthen Levee	Animal Control	LS	C	Exterminate rodents and backfill and compact or grout burrows.	39.656782 ° -121.787265 °	39.656782 ° -121.787265 °	910
11	3.26	3.26	Earthen Levee	Animal Control	LS	C	Exterminate rodents and backfill and compact or grout burrows.	39.654908 ° -121.788002 °	39.654908 ° -121.788002 °	911
12	3.27	3.27	Earthen Levee	Encroachments	LS	M	Prunings	39.654847 ° -121.787893 °	39.654847 ° -121.787893 °	4
13	3.48	3.48	Earthen Levee	Encroachments	LS	C	Prunings	39.652020 ° -121.789337 °	39.652020 ° -121.789337 °	905
14	9.66	9.69	Supplemental	USACE Erosion Survey	WS	U	Inspector Comments: 2009: no berm, vertical slope, no stability issues, sands and silts, 3.5 ft/s plus eddy currents [2009 SiteID:BTC_9-6_L]	39.574908 ° -121.807800 °	39.574875 ° -121.808108 °	7 Y

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
PO : Partially Obstructing
CO : Completely Obstructing
N : Not Inspected/Rated
C : Corrected
W : Watch/Monitor

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2010

Sutter Maintenance Yard Maintenance Area 0005

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Butte Creek 1	Left	15.29	11/03/2010 11/03/2010	Bob Duffey

Levee Mile Report Line	3
Start Levee Mile	1.68
End Levee Mile	1.68
Location	Land Side
Category	Earthen Levee
Item	Encroachments

View of the removed garbage but construction supply on pallets.

rduffey_f_20101115_302.jpg



Levee Mile Report Line	14
Start Levee Mile	9.66
End Levee Mile	9.69
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

2009: no berm, vertical slope, no stability issues, sands and silts, 3.5 ft/s plus eddy currents [2009 SiteID:BTC_9-6_L]

rduffey_f_20100921_015.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
PO : Partially Obstructing
CO : Completely Obstructing
N : Not Inspected/Rated
C : Corrected
W : Watch/Monitor

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2010 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0005

Waterway			Bank	Unit Miles
Unit No. 02 Butte Creek 1			Right	16.53

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	3/22/2010		9/21/2010	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Jason Cooper Sutter Yard		Jason Cooper Sutter Yard	
	Karen Hull Sutter Yard		Karen Hull Sutter Yard	
	Joel Farias Jr. Sutter Yard		Joel Farias Jr. Sutter Yard	

Check one:

- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. We have found no changes in flood project conditions other than the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the enclosed report.
- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. In addition to the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the report, we have found the following changes in flood project conditions.

(In the comment section below or on additional sheet(s), identify change of condition by: Start to End Levee Mile or GPS coordinates, location (Land Side, Water Side, or Crown), Item identification, and description of the current condition).

Comments

One of the boxes above is to be checked by the Local Maintaining Agency (LMA). If the second box is checked, additional information must also be submitted. This Unit Cover Sheet should be signed and dated by the LMA Representative and returned to DWR with any additional sheets by September 30 (Summer Inspection) or March 31 (Winter Inspection). Please retain a copy for your records. Please mail all of this information to :

DWR Summer/Winter Inspection Reports
3310 El Camino Avenue, Room LL-30
Sacramento, CA 95821-9000

X

Signature of LMA Representative

Date

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2010

Sutter Maintenance Yard Maintenance Area 0005

Waterway							Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Butte Creek 1							Right	16.53	11/03/2010 11/03/2010	Bob Duffey
LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
1	2.04	2.04	Earthen Levee	Animal Control	LS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout borrows.	39.538617 ° -121.851862 °	39.538617 ° -121.851862 °	9
2	2.46	2.46	Earthen Levee	Animal Control	WS	C	Exterminate rodents and backfill and compact or grout burrows.	39.543463 ° -121.847261 °	39.543463 ° -121.847261 °	1
3	4.86	4.86	Earthen Levee	Animal Control	LS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout borrows.	39.570017 ° -121.819527 °	39.570017 ° -121.819527 °	10 Y
4	7.38	7.38	Earthen Levee	Encroachments	LS	M	Prunings	39.599607 ° -121.793848 °	39.599607 ° -121.793848 °	11
5	7.86	7.86	Earthen Levee	Encroachments	LS	M	Prunings	39.605265 ° -121.788388 °	39.605265 ° -121.788388 °	2 Y
6	10.54	10.54	Earthen Levee	Encroachments	LS	M	Prunings	39.639018 ° -121.781458 °	39.639018 ° -121.781458 °	3
7	10.61	10.61	Earthen Levee	Encroachments	LS	M	Equipment	39.639967 ° -121.782152 °	39.639967 ° -121.782152 °	14
8	10.81	10.81	Earthen Levee	Slope Stability	LS	M	Repair the levee slope damaged by foot traffic and prevent access where possible.	39.642447 ° -121.784105 °	39.642447 ° -121.784105 °	16
9	11.22	11.22	Earthen Levee	Vegetation	LS	M	Elderberries are blocking visibility and flood fight capability.	39.647400 ° -121.787825 °	39.647400 ° -121.787825 °	26
10	11.83	11.83	Earthen Levee	Animal Control	CR	C	Exterminate rodents and backfill and compact or grout burrows.	39.655553 ° -121.789138 °	39.655553 ° -121.789138 °	27
11	12.54	12.54	Earthen Levee	Animal Control	WS	C	Exterminate rodents and backfill and compact or grout burrows.	39.665008 ° -121.785058 °	39.665008 ° -121.785058 °	18
12	13.13	13.13	Earthen Levee	Animal Control	LS	C	Exterminate rodents and backfill and compact or grout burrows.	39.672436 ° -121.781450 °	39.672436 ° -121.781450 °	4
13	13.23	13.23	Earthen Levee	Encroachments	LS	M	Equipment	39.673956 ° -121.781278 °	39.673956 ° -121.781278 °	5
14	13.35	13.35	Earthen Levee	Encroachments	LS	M	Prunings	39.675379 ° -121.780309 °	39.675379 ° -121.780309 °	6 Y
15	14.54	14.54	Earthen Levee	Encroachments	LS	CO	Buildings	39.691432 ° -121.778933 °	39.691432 ° -121.778933 °	25
16	15.96	15.96	Earthen Levee	Animal Control	LS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout borrows.	39.711222 ° -121.778188 °	39.711222 ° -121.778188 °	12
17	15.98	16.07	Earthen Levee	Animal Control	LS	C	Exterminate rodents and backfill and compact or grout burrows.	39.711337 ° -121.778350 °	39.711767 ° -121.779948 °	20

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
PO : Partially Obstructing
CO : Completely Obstructing
N : Not Inspected/Rated
C : Corrected
W : Watch/Monitor

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2010

Sutter Maintenance Yard Maintenance Area 0005

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Butte Creek 1	Right	16.53	11/03/2010 11/03/2010	Bob Duffey

Levee Mile Report Line	3
Start Levee Mile	4.86
End Levee Mile	4.86
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of the squirrel hole on the slope.

rduffey_f_20101115_297.jpg



Levee Mile Report Line	5
Start Levee Mile	7.86
End Levee Mile	7.86
Location	Land Side
Category	Earthen Levee
Item	Encroachments

View of the debris and garbage along the landside toe of the levee.

rduffey_f_20101115_298.jpg



Levee Mile Report Line	14
Start Levee Mile	13.35
End Levee Mile	13.35
Location	Land Side
Category	Earthen Levee
Item	Encroachments

View of prunings and garbage along the toe.

rduffey_f_20101115_299.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
PO : Partially Obstructing
CO : Completely Obstructing
N : Not Inspected/Rated
C : Corrected
W : Watch/Monitor

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2010 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0005

Waterway				Bank	Unit Miles
Unit No. 03 Little Chico Creek Diversion 1				Left	1.50
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)	
Unit Maintenance Rating (Fall Only)			A		
Date of Inspection	3/22/2010		9/21/2010		
DWR Inspector	Bob Duffey		Bob Duffey		
Accompanied By	Jason Cooper Sutter Yard		Jason Cooper Sutter Yard		

Check one:

- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. We have found no changes in flood project conditions other than the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the enclosed report.
- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. In addition to the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the report, we have found the following changes in flood project conditions.

(In the comment section below or on additional sheet(s), identify change of condition by: Start to End Levee Mile or GPS coordinates, location (Land Side, Water Side, or Crown), Item identification, and description of the current condition).

Comments

One of the boxes above is to be checked by the Local Maintaining Agency (LMA). If the second box is checked, additional information must also be submitted. This Unit Cover Sheet should be signed and dated by the LMA Representative and returned to DWR with any additional sheets by September 30 (Summer Inspection) or March 31 (Winter Inspection). Please retain a copy for your records. Please mail all of this information to :

DWR Summer/Winter Inspection Reports
3310 El Camino Avenue, Room LL-30
Sacramento, CA 95821-9000

X

Signature of LMA Representative

Date

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2010

Sutter Maintenance Yard Maintenance Area 0005

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Little Chico Creek Diversion 1	Left	1.50	11/03/2010 11/03/2010	Bob Duffey

LMR No.	Levee Mile		Category	Item	* Location	** Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
1	0.71	0.71	Earthen Levee	Crown Surface / Depressions / Rutting	CR	A	Keep the crown roadway free of vegetation.	39.726058 ° -121.781487 °	39.726058 ° -121.781487 °	3 Y

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
PO : Partially Obstructing
CO : Completely Obstructing
N : Not Inspected/Rated
C : Corrected
W : Watch/Monitor

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2010

Sutter Maintenance Yard Maintenance Area 0005

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Little Chico Creek Diversion 1	Left	1.50	11/03/2010 11/03/2010	Bob Duffey

Levee Mile Report Line	1
Start Levee Mile	0.71
End Levee Mile	0.71
Location	Crown
Category	Earthen Levee
Item	Crown Surface / Depressions / Rutting
View of crown roadway clear of vegetation.	
rduffey_f_20101115_300.jpg	

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable PO : Partially Obstructing C : Corrected
M : Minimally Acceptable CO : Completely Obstructing W : Watch/Monitor
U : Unacceptable N : Not Inspected/Rated